**LISTING OF CLAIMS:**

Please cancel claim 8;

Please withdraw from consideration claims 12-17 and 21-25; and

Please amend claims 3 and 7 as follows.

Claim 1. (original): A protein complex comprising at least two, preferably identical, subunits wherein at least one subunit is unaltered and at least one subunit is fused to a first molecule of interest and wherein the protein complex is able to interact with a cell surface receptor via said subunits.

Claim 2. (original): A protein complex according to claim 1, wherein said first molecule of interest can associate with, preferably via a covalent bond, a second molecule of interest to form a multimer of interest.

Claim 3. (presently amended): A protein complex according to claim 1, wherein said complex is essentially based on the heat labile enterotoxin (LT) of *E. coli* ~~or on the cholera toxin (CT) of *Vibrio cholerae*~~, preferably the B ~~subunits~~ subunit thereof.

Claim 4. (previously presented): A protein complex according to claim 1, wherein said complex comprises at least two subunits provided with a molecule of interest.

Claim 5. (original): A protein complex according to claim 4, wherein said at least two subunits are provided with a different molecule of interest.

Claim 6. (previously presented): A protein complex according to claim 1, wherein said cell surface receptor is present on intestinal epithelial.

Claim 7. (previously presented): A protein complex according to claim 1, wherein at least one molecule of interest is ~~an~~ a bacterial antigen.

Claim 8. (cancelled):

Claim 9. (previously presented): A protein complex according to claim 1, wherein at least one molecule of interest is an immunomodulatory protein, preferably a cytokine or a heat-shock protein.

Claim 10. (previously presented): A protein complex according to claim 1, wherein said complex comprises five B subunits of the heat labile enterotoxin (LT) of *E. coli* or the cholera toxin (CT) of *Vibrio cholerae*, wherein at least one subunit is unaltered.

Claim 11. (previously presented): A protein complex according to claim 1, wherein said cell surface receptor comprises a ganglioside molecule, preferably GM1, or a mimic thereof.

Claim 12. (withdrawn): A method for producing a protein complex according to claim 1, comprising :
a) providing a host cell with a nucleotide sequence encoding an unaltered subunit and a nucleotide sequence encoding a molecule of interest, wherein at least one molecule of interest is fused to a subunit;
b) culturing said host cell thereby allowing expression of said nucleotide sequences and allowing for assembly of the protein complex;
c) isolating the complex; and
d) determining the binding of the complex to a cell surface receptor or to a molecule which mimics a cell surface receptor.

Claim 13. (withdrawn): A method for producing a protein complex according to claim 1, comprising:
a) providing a first host cell with a nucleotide sequence encoding an unaltered subunit and a second host cell a nucleotide sequence encoding a molecule of interest, wherein at least one molecule of interest is fused to a subunit;
b) culturing said host cells thereby allowing expression of said nucleotide sequences;
c) isolating the proteins encoded by said nucleotides;

d) contacting the isolated protein under conditions allowing for assembly of the protein complex;

e) isolating the complex; and

f) determining the binding of the complex to a cell surface receptor or to a molecule which mimics a cell surface receptor.

Claim 14. (withdrawn): A method according to claim 13, wherein said host cell is provided with said nucleotide sequences using transformation, co-transformation, crossing, re-transformation or transient transfection.

Claim 15. (withdrawn): A cell comprising the protein complex according to claim 1.

Claim 16. (withdrawn): A cell according to claim 15, wherein said cell is a plant cell.

Claim 17. (withdrawn): A cell according to claim 15, wherein said cell is an edible cell.

Claim 18. (previously presented): A composition comprising a protein complex according to claim 1.

Claim 19. (previously presented): A vaccine comprising a protein complex according to claim 1 and a pharmaceutically acceptable carrier.

Claim 20. (original): A pharmaceutical composition comprising an effective amount of a vaccine according to claim 19.

Claim 21. (withdrawn): Use of a protein complex according to claim 1 as a mucosal carrier molecule.

Claim 22. (withdrawn): A method for modulating an immune response of a subject comprising administering to the subject at least one dose of an effective amount of a protein complex according to claim 1, wherein the molecule of interest is an antigen.

Claim 23. (withdrawn): A method for mucosal immunisation comprising the administration of a vaccine according to claim 19 to a subject.

Claim 24. (withdrawn): A composition comprising a cell according to claim 15.

Claim 25 (withdrawn): A vaccine comprising a cell according to claim 15 and a pharmaceutically acceptable carrier.